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Docket 83682AEK
Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	Group Art Unit: 1772
Thomas M. Laney, et al	Examiner: Marc A. Patterson
STACKED MICROVOIDED LIGHT DIFFUSER	I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
Serial No. 10/020,404	Deidra L. Mack Deidra L. Mack
Filed 14 December 2001	Date January 26, 2006

Mail Stop APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appeal Brief Transmittal

Enclosed herewith is Appellants' Appeal Brief for the above-identified application.

The Commissioner is hereby authorized to charge the Appeal Brief filing fee to Deposit Account 05-0225. **A duplicate copy of this letter is enclosed.**

Respectfully submitted,

Attorney for Appellants
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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.

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Thomas M. Laney, et al

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Alexandria, VA. 22313-1450

Sir:

APPEAL BRIEF PURSUANT TO 37 C.F.R. 41.37 and 35 U.S.C. 134

Applicants hereby appeal to the Board of Patent Appeals and Interferences from the Examiner's Final Rejection of claims 1-20, 22-31 and 35 which was contained in the Office Action mailed June 23, 2005.

A timely Notice of Appeal was mailed with certificate of first-class mailing October 24, 2005 (with one-month extension of time), and received at the PTO OIPE October 26, 2005.

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Real Party In Interest

The Eastman Kodak Company, is the assignee and real party in interest.

Related Appeals And Interferences

No appeals or interferences are known which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

Status Of The Claims

Claims 1-20, 22-31 and 35 are pending in the application.
Claims 1-20, 22-31 and 35 are rejected under 35 USC § 103.
Claims 1-20, 22-31 and 35 are appealed.

Appendix I provides a clean, double-spaced copy of the claims on appeal.

Status Of Amendments

No amendments were filed after Final Rejection.

Summary of Claimed Subject Matter

Independent Claim 1:

With reference to the parts in FIG 1 and the specification (page/line), the invention of claim 1 is directed to a light diffuser film **(12)** containing two voided layers. The diffuser film includes microvoided layer **(22)** containing small microvoids **(24)**, and microvoided layer **(28)** containing large microvoids **(30)**. The voids have an average length in the x, y, or z direction or a frequency (page/line = 6/23) that varies by at least 28% as between at least two voided layers **(22,28)**. The "z" direction is parallel to the light path and the "x" and "y" directions are in the plane of the film perpendicular to the light path (6/21; 7/27; 8/2; 8/8; 22/20-23). The layers are separated by an interface **(26)**. The variation in one or more of these parameters is sufficient to increase the diffuse light transmission efficiency of the film by at least 10% at 500nm (7/14) compared to a single voided layer of the same thickness as the layers but with

only one frequency or void size and to provide a diffuse light transmission efficiency of the diffuser greater than 80% at 500 nm (original Claim 21).

Pertinent definitions well-known in the art and/or as described throughout and particularly at pages 5, 6, 10 and 17 of the specification are as follows:

"diffuse light transmission efficiency" (6/3) means the ratio of diffuse transmitted (output) light at 500 nm to total transmitted (output) light at 500 nm multiplied by a factor of 100;

"percent light transmission" (10/15-26) means the ratio of total transmitted light divided by the total incident light multiplied by a factor of 100;

"microvoids"(6/9 et seq) means pores formed in an oriented polymeric film during stretching. These pores are initiated by either inorganic particles, organic particles, or microbeads. The size of these voids is determined by the size of the particle or microbeads used to initiate the void and by the stretch ratio used to stretch the oriented polymeric film. The pores can range from 0.6 to 150 μm's in machine and cross machine directions of the film. They can range from 0.2 to 30 micrometers in height. "Void" is used herein to mean devoid of added solid and liquid matter, although it is likely the "voids" contain gas.

The invention provides a transmissive diffuser that exhibits an improved combination of total light transmission and light diffusion efficiency. Liquid Crystal Displays (LCDs) employ a backlight to produce the observed image. It is desired to have that backlight as diffuse as possible so that the backlight will be hidden from view while at the same time transmitting a high light level to provide a bright image. These two parameters are measured by diffuse light transmission efficiency (for the exiting light, the ratio of diffuse to total light times 100) and light transmission (total light out divided by total light in times 100).

The invention is based on the discovery that the use of a combination of two or more voided layers in a diffuser where the voids in the two layers differ either in size or frequency by more than 28%, as detailed in the claims, will provide an improved combination of light transmission and diffuse transmission efficiency.

Grounds of Rejection to be Reviewed on Appeal

The following issue is presented for review by the Board of Patent Appeals and Interferences:

Claims 1-20, 22-31 and 35, are rejected under 35 U.S.C. 103(a) in the Final rejection dated June 23, 2005, as being unpatentable over Allen et al. (US 6,057,961).

Arguments

The obviousness rejection of claim 1 pursuant to 35 USC 103 is based entirely on the Allen et al. reference. The rejection is improper because (1) Allen et al. is primarily directed to reflective polarizers and reflective diffusers useful therewith wherein the diffusers require the presence of two immiscible polymeric phases (not voids) and, (2) in passages where voids are mentioned, they are shown not to be equivalent to the dispersed phase particles of Allen et al. and are taught away from by Allen and/or are not suggested to be used in the multilayer arrangement of the invention with varying void sizes or frequencies and transmission qualities of the claim.

(1) The Abstract of Allen et al. refers to "a disperse phase of polymeric particles disposed within a continuous birefringent matrix". This refers to a layer having particles of one polymer dispersed in an immiscible polymer continuous phase. The pencil-shaped components **(14)** in all of the figures are not voids but are discontinuous phase polymeric materials having been stretched along with the film to obtain the elongated shape. See col. 7/line 38 and col. 15/ lines 53 et seq. The components **(14)** are not voids. They are polymeric materials that can be made to match the refractive index of the continuous phase in one direction but not the other by stretching. The internal portion of a void cannot be adjusted with respect to refractive index by stretching. Further, although voids are made by stretching the film containing particles so that a void forms about the particle, the particles used for voiding do not stretch significantly during the voiding process and thus do not play a role in refractive index control.

The Allen et al. disclosure is primarily directed to a reflective polarizer. In a conventional absorptive polarizer, the light components polarized parallel to the X axis are transmitted while those polarized parallel to the Y axis are not transmitted. Less than 50% of light is transmitted in this manner by an absorptive polarizer. In a Liquid Crystal Display, a reflective polarizer seeks to diffusely reflect (col. 4/line 27) the untransmitted light component polarized parallel to the Y axis so that it can then be reflected back to the polarizer with a different orientation with some X component that will be transmitted. Such a use

requires a reflective ability of the diffuser. Further Evidence of this objective of the reference is presented in Exhibit II which identifies many portions of the reference where the reflective polarizer is discussed and reflective diffuser is discussed for use therewith.

(2) Allen et al.mentions the possibility of employing voids, however they are not recommended. Also, there is no teaching of the claim limitations as to multiple layers having 28% size and or frequency variations between layers nor is there any teaching of why one would want to employ this arrangement. Sections of Allen where the use of microvoids is discouraged are included in Appendix II.

Disclosure at col. 12/ lines 36-67 of Allen et al. talks about Dimensions and Volume Fraction of the disperse polymeric phrase. The discussion appears to be limited to reflective polarizers (col. 12/line 38) and reflection is still the objective (col. 12/line 57). It does not relate to voids.

The possibility of microvoiding is mentioned at col. 22/ lines 5-15 but it is only concluded that the voids may be used in conjunction with the polymeric particles, not instead of the particles, and no benefit of including them is disclosed. Moreover there is no suggestion of multiple layers with the requisite variation in the size or frequency. Col. 22/lines 40 et seq. suggest multilayer combinations. The use of voids is not included in this discussion.

At col. 3/ lines 7-13, Allen et al. suggests that voids would not be useful for his optical devices because, among other reasons, "it is <u>not possible to produce a film axis for which refractive indices are relatively matched</u>" and because of he physically unstable nature of the voids. Thus the multilayer film of the present invention is neither disclosed nor suggested by Allen et al.

In the Final Rejection, the Examiner relies on his reasons for rejection as stated in the Office Action of August 11, 2004 wherein claims 1-20, 22-31 and 35 stand rejected under 35 USC 103(a) as being unpatentable over Allen et al. ('961). The Examiner states that Allen et al. disclose a light diffuser comprising a polymeric film <u>wherein the film comprises a plurality of layers having a void geometry</u> with a circular cross section in a plane

parallel to the direction of light traveling in which the void frequency varies between at least two layers.

The Examiner relies on Allen et al. col. 22/lines 40-41 for the disclosure of a multilayer of microvoided layers, but the reference is in fact to a continuous/disperse film (two polymeric phases) and not to microvoided layers. As evidence that Allen discloses two layers in which the frequency of voids varies between layers, the Examiner relies on col. 22, lines 50-51 which states:

> If the optical thicknesses of the phases within the sheets are substantially equal (that is if the two sheets present a substantially equal and large number of scatterers to incident light along a given axis), the composite will reflect at somewhat greater efficiency substantially the same bandwidth and spectral range of reflectivity. If the optical phases within the sheets s are not substantially equal, the composite will reflect across a broader bandwidth than the individual phases.

The quoted passage is again focused on two polymeric phases rather than voids and is about reflective not transmissive diffusion. Further, the previously cited portion of Allen confirms that voids cannot easily be oriented along a given axis as Allen requires. Voids cannot be equated to the dispersed polymer particles. Finally, it is not clear what is meant by "optical thicknesses" and "optical phases...are not substantially equal" but it appears to mean in the Z direction of light travel; in any event, it is not clear that the frequency or the particle dimensions are meant by Allen.

The Examiner concludes his rejection by ignoring all of the teachings away in Allen et al., equating voids to polymeric phases, acknowledging that the reference fails to teach any parameters within the numeric claim limitations, and by then concluding that one skilled in the art would routinely arrive at a two layer voided film with microvoid sizes and frequencies in the claimed range in order to improve diffuse light transmission efficiency by 10% to at least 80%. In discussing the prior art use of microvoids, Allen notes at col.3/ lines 4-13:

> The refractive index mismatch between the void and the polymer in these "microvoided" films is typically quite large (about 0.5), causing substantial diffuse reflection. However, <u>the optical properties of microvoided materials are difficult to control because of variations of the geometry of the interfaces, and it is not possible to produce a film axis for which refractive indices are relatively matched, as would be useful for polarization-sensitive optical properties</u>.

Thus, microvoids are unsuitable for Allen et al. because the refractive index of the continuous phase and the dispersed particles must match along one axis, but the voids have a refractive index differing by 0.5 from a polymeric material and so cannot be made to match along any axis to a polymeric material. Allen refers to materials having a difference in refractive index of up to 0.2.

The Examiner suggests that the volume fraction of dispersed particles somehow relates to the frequency or size; however, volume fraction normally refers to the bulk volume occupied by the particles or voids as a % of the total volume. This says nothing about the attributes of the individual voids or particles.

In the Final Rejection, the Examiner notes that the suggestion of an equal and large number of scatterers is suggestive of an unequal number. However, the scatterers are not voids, and the statement is not instructive as to what "large" means and why one would want unequal scatterers.

Finally, the Examiner states in his Final Rejection:

> Applicant argues that Allen et al. does not teach how to vary physical parameters of the film to obtain desired transmission properties. However, as stated on page 2 of the previous Action, Allen et al. teaches that a variation in the parameters causes a variation in transmission properties, and it is therefore not necessary for Allen et al. to disclose a method of varying the parameters.

The burden of negating patentability is far greater than perceived by the Examiner. There is no motivation provided in the Allen et al. patent to employ voids, to arrive at two voided layers, or to arrive at two layers with the prescribed void size or frequency difference. The Examiner's logic would

invalidate all selection patents and combination patents instead of employing an obviousness standard.

Grouping of Claims

All of the claims are grouped together for patentability consideration.

Conclusion

For the above reasons, Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the rejection by the Examiner and mandate the allowance of Claims 1-20, 22-31 and 35 and the rejoinder of non-elected species.

Respectfully submitted,

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APPENDIX I - CLAIMS ON APPEAL

1. A light diffuser comprising a polymeric film wherein the film comprises a plurality of layers having microvoids in which the average length of the microvoid in the x, y, or z direction or the frequency varies by at least 28% between at least two layers, and the variation is sufficient to increase the diffuse light transmission efficiency by at least 10% at 500nm compared to a single voided layer of the same thickness as the layers but with only one frequency or void size, wherein the diffuse light transmission efficiency of the diffuser is greater than 80% at 500 nm.

2. The light diffuser of Claim 1 wherein the polymeric film comprises exactly two voided layers.

3. The light diffuser of Claim 1 wherein the polymeric film contains at least two voided layers and at least one non-voided layer.

4. The light diffuser of Claim 3 wherein the voided and non-voided layers are integral.

5. The light diffuser of Claim 3 wherein the polymeric film the non-voided layer further comprises addenda.

6. The light diffuser of Claim 1 wherein the polymeric film contains at least two voided layers that are separated by a non-voided layer.

7. The light diffuser of Claim 1 wherein the said plurality of voided layers that vary in geometry or frequency improve the diffuse light transmission efficiency compared to a single voided layer of the same thickness and either void geometry or frequency by at least 10% at 500 nm.

8. The light diffuser of Claim 1 wherein the microvoids have a substantially circular cross-section in a plane perpendicular to the direction of light travel.

9. The light diffuser of Claim 1 wherein the x/y/z size or frequency of the voids vary by between 28% and 300% between at least two layers.

10. The light diffuser of Claim 1 wherein the x/y/z size or frequency of the voids vary by at least 60% between at least two layers.

11. The light diffuser of Claim 1 wherein the voided layers are arranged in order of increasing size of voids in reference to the light passing through the film.

12. The light diffuser of Claim 1 wherein the voided layers are arranged in order of decreasing size of voids in reference to the light passing through the film.

13. The light diffuser of Claim 1 wherein the voided layers are arranged in order of increasing frequency of voids in reference to the light passing through the film.

14. The light diffuser of Claim 1 wherein the voided layers are arranged in order of decreasing frequency of voids in reference to the light passing through the film.

15. The light diffuser of Claim 1 wherein the film contains at least one polymeric skin layer.

16. The light diffuser of Claim 1 wherein the difference in refractive index between the thermoplastic polymeric material and the microvoids is greater than 0.2.

17. The light diffuser of Claim 1 wherein said microvoids are formed by organic microspheres.

18. The light diffuser of Claim 1 wherein the microvoids contain cross-linked polymer beads.

19. The light diffuser of Claim 1 wherein the microvoids contain a gas.

20. The light diffuser of Claim 1 wherein the elastic modulus of the light diffuser is greater than 500 MPa .

22. The light diffuser of Claim 1 wherein said diffuse light transmission efficiency is greater than 87% at 500 nm.

23. The light diffuser of Claim 1 wherein said microvoids have a major axis diameter to minor axis diameter ratio of less than 2.0.

24. The light diffuser of Claim 1 wherein said microvoids have a major axis diameter to minor axis diameter ratio of between 1.0 and 1.6.

25. The light diffuser of Claim 1 wherein said thermoplastic layers contain greater than 4 index of refraction changes greater than 0.20 parallel to the direction of light travel.

26. The light diffuser of Claim 1 wherein said microvoids have an average volume of between 8 and 42 cubic micrometers.

27. The light diffuser of Claim 1 wherein the said light diffuser has a thickness less than 250 micrometers.

28. The light diffuser of Claim 1 wherein said thermoplastic layer comprises polyolefin polymer.

29. The light diffuser of Claim 1 wherein said thermoplastic layer comprises polyester polymer.

30. The light diffuser of Claim 18 wherein said cross linked polymer beads have a mean particle size less than 2.0 micrometers.

31. The light diffuser of Claim 18 wherein said cross linked polymer beads have a mean particle size between 0.30 and 1.7 micrometers.

35. The light diffuser of Claim 1 wherein the total light transmission is at least 65% at 500nm.

APPENDIX II – EVIDENCE

Allen et al. - Limiting Disclosures and Teaching Away

Statements That Limit The Invention To Reflective Polarizers For LC Displays or Mismatched Phases

Column/line	Statement from US 6,057,961
C1/L12-15	This invention relates to optical materials which contain structures suitable for controlling optical characteristics, such as reflectance and transmission. In a further aspect, it relates to control of specific polarizations of reflected or transmitted light.
C3/L4-13	The refractive index mismatch between the void and the polymer in these "microvoided" films is typically quite large (about 0.5), causing substantial diffuse reflection. However, the optical properties of microvoided materials are difficult to control because of variations of the geometry of the interfaces, and it is not possible to produce a film axis for which refractive indices are relatively matched, as would be useful for polarization-sensitive optical properties. Furthermore, the voids in such material can be easily collapsed through exposure to heat and pressure.
C3/L31-32	There thus remains a need in the art for an optical material consisting of a continuous and a dispersed phase
C4/L11-16	In one aspect, the present invention relates to a diffusely reflective film or other optical body comprising a birefringent continuous polymeric phase and a substantially nonbirefringent disperse phase disposed within the continuous phase.
C4L33-41	In a related aspect, the present invention relates to an optical film or other optical body comprising a birefringent continuous phase and a disperse phase, wherein the indices of refraction of the continuous and disperse phases are substantially matched (i.e., wherein the index difference between the continuous and disperse phases is less than about 0.05) along an axis perpendicular to a surface of the optical body.
C4/L42-47	In another aspect, the present invention relates to a composite optical body comprising a polymeric continuous birefringent first phase in which the disperse second phase may be birefringent, but in which the degree of match and mismatch in at least two orthogonal directions is primarily due to the birefringence of the first phase.
C4/L65-67	In yet another aspect, the present invention relates to an optical body acting as a reflective polarizer with a high extinction ratio
C5/L8-11	In another aspect, the present invention relates to an optical body comprising a continuous phase, a disperse phase whose index of refraction differs from said continuous phase by greater than about 0.05 along a first axis and by less than about 0.05 along a second axis orthogonal to said first axis, and a dichroic dye.
C5/L18-20	In another aspect of the present invention, an optical body is provided which has at least first and second phases that are co-continuous along at least one axis.

Column/line	Statement from US 6,057,961
C5/L27-31	In still another aspect of the present invention, an optical body is provided which comprises a film having a continuous and disperse phase, with an antireflective layer disposed thereon.
C4/L29-33	These properties can be used to make optical films for a variety of uses, including low loss (significantly nonabsorbing) reflective polarizers for which polarizations of light that are not significantly transmitted are diffusely reflected.
C4/L48-49	In still another aspect, the present invention relates to a method for obtaining a diffuse reflective polarizer
C5/L34-44	In the various aspects of the present invention, the reflection and transmission properties for at least two orthogonal polarizations of incident light are determined by the selection or manipulation of various parameters, including the optical indices of the continuous and disperse phases, the size and shape of the disperse phase particles, the volume fraction of the disperse phase, the thickness of the optical body through which some fraction of the incident light is to pass, and the wavelength or wavelength band of electromagnetic radiation of interest.
C6/L18-22	In general, in the operation of this invention, the disperse phase particles should be sized less than several wavelengths of light in one or two mutually orthogonal dimensions if diffuse, rather than specular, reflection is preferred.
C6/L43-48	Within certain limits, increasing the volume fraction of the disperse phase tends to increase the amount of scattering that a light ray experiences after entering the body for both the match and mismatch directions of polarized light. This factor is important for controlling the reflection and transmission properties for a given application.
C9/L11-17	When the material is to be used as a polarizer, it is preferably processed, as by stretching and allowing some dimensional relaxation in the cross stretch in-plane direction, so that the index of refraction difference between the continuous and disperse phases is large along a first axis in a plane parallel to a surface of the material and small along the other two orthogonal axes.
C9/L21-22	Some of the polarizers within the scope of the present invention are elliptical polarizers.
C9/L36-38	At an extreme, where the index of refraction of the polymers match on one axis, the elliptical polarizer will be a diffuse reflecting polarizer.
C9/L40-44	The materials selected for use in a polarizer in accordance with the present invention, and the degree of orientation of these materials, are preferably chosen so that the phases in the finished polarizer have at least one axis for which the associated indices of refraction are substantially equal.
C10/L29-30	Preferably, in applications where the optical body is to be used as a low loss reflective polarizer,
C11/L6-11	Preferably, for a low loss reflective polarizer, the preferred embodiment consists of a disperse phase disposed within the continuous phase as a series of rod-like structures which, as a consequence of orientation, have a high aspect ratio which can enhance reflection for polarizations parallel to the orientation direction by increasing the scattering strength and dispersion for that polarization relative to polarizations perpendicular to the orientation direction.

Column/line	Statement from US 6,057,961
C11/L33-36	The refractive index of the medium may be chosen in consideration of the refractive indices of the disperse phase and the continuous phase so as to achieve a desired optical effect (i.e., reflection or polarization along a given axis).
C12/L36-40	In applications where the optical body is to be used as a low loss reflective polarizer, the structures of the disperse phase preferably have a high aspect ratio, i.e., the structures are substantially larger in one dimension than in any other dimension.
C16/L23-27	Of these, 2,6-polyethylene naphthalate (PEN) is especially preferred because of its strain induced birefringence, and because of its ability to remain permanently birefringent after stretching. PEN has a refractive index for polarized incident light of 550 nm wavelength which increases after stretching when the plane of polarization is parallel to the axis of stretch from about 1.64 to as high as about 1.9, while the refractive index decreases for light polarized perpendicular to the axis of stretch. PEN exhibits a birefringence
C28/L20-24	The optical bodies of the present invention are particularly useful as diffuse polarizers. However, optical bodies may also be made in accordance with the invention which operate as reflective polarizers or diffuse mirrors.
C28/L41-43	The reflective polarizer of the present invention has many different applications, and is particularly useful in liquid crystal display panels.
C28/L56-60	Glazing materials prepared in this manner can be made to be polarization specific, so that the fenestration is essentially transparent to a first polarization of light but substantially reflects a second polarization of light, thereby eliminating or reducing glare.
C29/L20-23	The optical films of the present invention may be used in various light fixture applications, especially those in which polarized emitted light is preferred.
C29/L59-64	As described previously, the optical films of the present invention may be either a diffuse reflecting polarizing film (DRPF), in which light of one plane of polarization is transmitted and light of the other plane of polarization is diffusely reflected, or it may be a diffuse reflecting mirror film (DRMF) in which both planes of polarization are diffusely reflected from the film.
C31/L15-18	The preferred reflective polarizers specularly transmit light of a desired polarization and reflect light of another polarization. Light produced by a diffuse source is randomly polarized and therefore has polarization components (a) and (b) present. This light is incident on the reflective polarizing element.
C32/L1-7	The DRPF of the present invention functions similar to the multilayer RPF to increase the amount of light of the desired polarization that is emitted by the polarized light fixture, however, the initially rejected light of the wrong polarization is diffusely reflected back into the light fixture where it may be randomized, partially converted to light of the correct polarization, and specularly transmitted through the polarizing element.
C32/L65-66	In yet another application, optical films of the present invention may be used to generate polarized light used in smoke detection systems or in the analysis of the polarization of light scattered from smoke particles
C33/L31-33	The films of the present invention can also be made to extract only a single polarization of light, thereby creating a polarization-specific source.

Statements that teach away from present invention

Column/line	Statement from US 6,057,961
C5/L62-66	If the particles are too large, the light is specularly reflected from the particle surface, with very little diffusion into other directions. When the particles are too large in at least two orthogonal directions, undesirable iridescence effects can also occur.
C2/L62-C3/L13	Other optical films have been made by incorporating a dispersion of inclusions of a first polymer into a second polymer, and then stretching the resulting composite in one or two directions. U.S. Pat. No. 4,871,784 (Otonari et al.) is exemplative of this technology. The polymers are selected such that there is low adhesion between the dispersed phase and the surrounding matrix polymer, so that an elliptical void is formed around each inclusion where the film is stretched. Such voids have dimensions of the order of visible wavelengths. <u>The refractive index mismatch between the void and the polymer in these "microvoided" films is typically quite large (about 0.5), causing substantial diffuse reflection. However, the optical properties of microvoided materials are difficult to control because of variations of the geometry of the interfaces, and it is not possible to produce a film axis for which refractive indices are relatively matched, as would be useful for polarization-sensitive optical properties.</u> Furthermore, the voids in such material can be easily collapsed through exposure to heat and pressure.
C4/L18-21	The indices of refraction of the continuous and disperse phases are substantially mismatched (i.e., differ from one another by more than about 0.05) along a first of three mutually orthogonal axes, and are substantially latched (i.e., differ by less than about 0.05) along a second of three mutually orthogonal axes.
C28/L28-29	This index difference is typically at least about 0. 1, more preferably about 0.15, and most preferably about 0.2.

APPENDIX III – RELATED PROCEEDINGS

None